

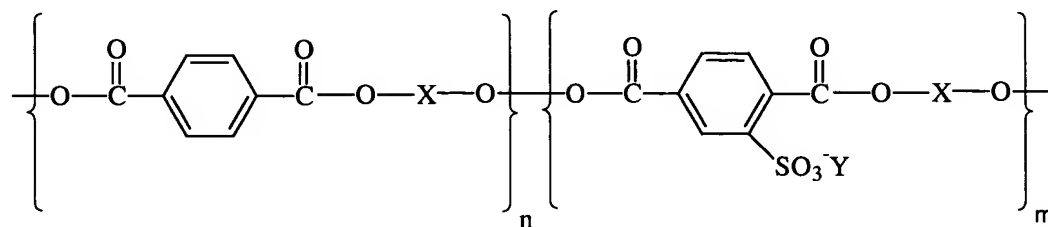
[0053] WHAT IS CLAIMED IS:

1. A process comprising adding a polymer to heated water; adding a colorant dispersion, and then subsequently adding an aggregating agent; heating the resulting mixture above about the polymer glass transition temperature thereby causing aggregation and coalescence, optionally followed by cooling and drying, and subsequently adding alumina particles, and wherein there results particles comprised of said polymer, said colorant, said aggregating agent, and said alumina, and optionally wherein said alumina is present on the surface of said particles.

2. A process in accordance with **claim 1** wherein said polymer is a polyester.

3. A process in accordance with **claim 1** wherein said polymer is a sulfonated polyester.

4. A process in accordance with **claim 1** wherein said polymer is the polyester



wherein Y is an alkali metal, X is a glycol, and n and m each represent the number of segments.

5. A process in accordance with **claim 4** wherein said alkali metal is potassium.

6. A process in accordance with **claim 4** wherein said alkali metal is sodium.

7. A process in accordance with **claim 4** wherein said glycol is an alkylene glycol.

8. A process in accordance with **claim 7** wherein said alkylene contains from about 2 to about 18 carbon atoms.

9. A process in accordance with **claim 4** wherein said m and said n are each a number of from about 10 to about 275.

10. A process in accordance with **claim 4** wherein said m and said n are each a number of from about 75 to about 150.

11. A process in accordance with **claim 1** wherein said alumina particles are present in an amount of equal to or about at least 4 weight percent.

12. A process in accordance with **claim 1** wherein said alumina particles are present in an amount of from about 4 to about 12 weight percent.

13. A process in accordance with **claim 1** wherein said alumina particles are present in an amount of from about 5 to about 10 weight percent.

14. A process in accordance with **claim 1** wherein said alumina particles are present in an amount of from about 5 to about 7, or from about 0.1 to about 3 weight percent.

15. A process in accordance with **claim 1** wherein said alumina particles are present in an amount of from about 4 to about 5 weight percent, or from about 8 to about 11 weight percent.

16. A process in accordance with **claim 1** wherein said heating above said T_g is from about 70°C to about 95°C, or is from about 75°C to about 90°C, and said polymer is a nonpolyester.

17. A process in accordance with **claim 1** wherein said polymer is present in an amount of from about 80 to about 98 percent by weight, and said colorant is present in an amount of from about 2 to about 20 weight percent of the toner.

18. A process in accordance with **claim 1** wherein said polymer is initially heated at from about 40°C to about 60°C, and said heating above about said polymer T_g is from about 65°C to about 75°C, and said polymer is a nonpolyester.

19. A process in accordance with **claim 1** wherein said particles resulting are isolated, and said alumina particles are present on the surface of said particles, and wherein said particles are toner particles.

20. A process in accordance with **claim 1** wherein the colorant is a pigment.

21. A process in accordance with **claim 1** wherein said polymer is selected from the group consisting of poly(styrene-butadiene), poly(methylstyrene-butadiene), poly(methyl methacrylate-butadiene), poly(ethyl methacrylate-butadiene), poly(propyl methacrylate-butadiene), poly(butyl methacrylate-butadiene), poly(methyl acrylate-butadiene), poly(ethyl acrylate-butadiene), poly(propyl acrylate-butadiene), poly(butyl acrylate-butadiene), poly(styrene-isoprene), poly(methylstyrene-isoprene), poly(methyl methacrylate-isoprene), poly(ethyl methacrylate-isoprene), poly(propyl methacrylate-isoprene), poly(butyl methacrylate-isoprene), poly(methyl acrylate-isoprene), poly(ethyl acrylate-isoprene), poly(propyl acrylate-isoprene), poly(butyl acrylate-isoprene); poly(styrene-propyl acrylate), poly(styrene-butyl acrylate), poly(styrene-butadiene-acrylic acid), poly(styrene-butadiene-methacrylic acid), poly(styrene-butadiene-acrylonitrile-acrylic acid), poly(styrene-butyl acrylate-acrylic acid), poly(styrene-butyl acrylate-methacrylic acid), poly(styrene-butyl acrylate-acrylonitrile), and poly(styrene-butyl acrylate-acrylonitrile-acrylic acid).

22. A process in accordance with **claim 1** wherein said colorant is carbon black, cyan, yellow, magenta, or mixtures thereof, and the product isolated is a toner of from about 2 to about 25 microns in volume average diameter, and optionally wherein there is added to the surface of the formed toner metal salts, metal salts of fatty acids, silicas, metal oxides, or mixtures thereof, each in an amount of from about 0.1 to about 10 weight percent of the obtained toner.

23. A process in accordance with **claim 4** wherein the sulfonated polyester (i) is a polyester of poly(1,2-propylene-sodio 5-sulfoisophthalate), poly(neopentylene-sodio 5-sulfoisophthalate), poly(diethylene-sodio 5-sulfoisophthalate), copoly-(1,2-propylene-sodio 5-sulfoisophthalate)-copoly-(1,2-propylene-terephthalatephthalate), copoly-(1,2-propylene-diethylenesodio 5-sulfoisophthalate)-copoly-(1,2-propylene-diethylene-terephthalatephthalate), copoly-(ethylene-neopentylene-sodio 5-sulfoisophthalate)-copoly-(ethylene-neopentylene-terephthalate-phthalate), or copoly-(propoxylated bisphenol A)-copoly-(propoxylated bisphenol A-sodio 5-sulfoisophthalate).

24. A process in accordance with **claim 4** wherein said polyester resin is poly(1,2-propylene-sodio 5-sulfoisophthalate).

25. A process in accordance with **claim 4** wherein said polyester resin is polyneopentylene-sodio 5-sulfoisophthalate polyester.

26. A toner process comprising heating a mixture of a latex and a colorant dispersion in the presence of an aggregating agent, and subsequently adding in an amount of at least about 4 weight percent alumina particles, and optionally which particles primarily function as a charge enhancing additive.

27. A toner process comprising heating a mixture of a latex aggregating agent and a colorant in the presence of water, which water is at a temperature of above about 40°C and less than about 100°C, which heating is accomplished below about the glass transition temperature, T_g, of polymer contained in the latex, followed by a second heating above about the T_g polymer temperature, and subsequently adding in an amount of at least about 4 weight percent alumina particles.

28. A process in accordance with **claim 1** wherein said aggregating agent is an alkali earth metal, a transition metal salt, or mixtures thereof.

29. A process in accordance with **claim 1** wherein said aggregating agent is beryllium chloride, beryllium bromide, beryllium iodide, beryllium acetate, beryllium sulfate, magnesium chloride, magnesium bromide, magnesium iodide, magnesium acetate, magnesium sulfate, calcium chloride, calcium bromide, calcium iodide, calcium acetate, calcium sulfate, strontium chloride, strontium bromide, strontium iodide, strontium acetate, strontium sulfate, barium chloride, barium bromide, or barium iodide.

30. A process in accordance with **claim 1** wherein said aggregating agent is a transition metal salt of acetates, acetoacetates, sulfates of vanadium, niobium, tantalum, chromium, molybdenum, tungsten, manganese, iron, ruthenium, cobalt, nickel, copper, zinc, cadmium, silver salts, aluminum salts optionally of aluminum acetate, aluminum polyaluminum chloride, aluminum halides, or mixtures thereof, and optionally wherein the concentration thereof is of from about 0.1 to about 5 weight percent by weight of water.

31. A process in accordance with **claim 1** wherein said aggregating agent is zinc acetate.

32. A process in accordance with **claim 1** wherein said aggregating agent is present in an amount of from about 0.1 to about 10 weight percent.

33. A process in accordance with **claim 1** wherein said aggregating agent is present in an amount of from about 1 to about 5 weight percent.